

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.15**SOURCE INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** SIR-001293**Date Inspected:** 09-Sep-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**Location:** Changxing Dao, Shanghai**Quality Control Contact:** Willaim (Bill) Oak**Quality Control Present:** Yes No**Material transfer:** Yes No N/A**Sampled Items:** Yes No N/A**Stock Transfer:** Yes No N/A**OK to Cut:** Yes No N/A**Rebar Test Witness:** Yes No N/A**Delayed/Cancelled:** Yes No N/A**Other:** Coatings Inspection**Bridge No:** 34-0006**Component:** Office, Yard Walk, Lift 3 West, Cross Beam #**Bid Item:** 77, 78, 79**Lot No:** B265**Summary of Items Observed:**

On this date Caltrans Office of Structural Materials (OSM) Quality Assurance (QA) NACE III coating inspector, Mr. James Lumley arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island in Shanghai, China. The purpose of the coating inspections are to monitor the surface preparation and coating applications for the SAS Bay Bridge project. This QA NACE III coating inspector observed the following:

Office

Organize project documentation and download photos.

Yard Walk

Performed general yard walk concurrent with ABF/ZPMC meeting. cursory inspections of Lift 3 East, North Tower Lift#1, Galvanized Handrails, OBG 6CE, Cross Beams #1&2.

Lift 3 West

Testing was performed on Interzinc 22 repair areas in preparation of "mist" coat application. MEK testing and Pencil hardness testing were performed and subsequently deemed compliant with Specification required minimum values.

Cross Beam #1

Internal repair areas from damages incurred from trial assembly were abrasive blasted to base metal and an SSPC SP-10 condition. Inspection revealed numerous areas that required additional re-work prior to application of Interzinc 22. ZPMC performed re-work and applied Interzinc 22 to properly prepared surfaces. Note: The ladder/handrail leading to the access perforation on the vertical side panel requires Galvanizing it is currently coated with Interzinc 22. Caltrans QA Lumley informed ABF QA Bill Oak to amend subject Non-compliant works.

Cross Beam #2

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Final internal inspection was performed with ABF QA Bill Oak and ZPMC QC Don Yao Fei and Caltrans QA Lumley. Internal ceiling areas and vertical surfaces exhibited large amount of dry-spray which required removal, ABF Bill Oak directed ZPMC to apply Sikaflex 221 to areas behind cope holes where weld terminations formed a “pocket/ depression” where access for paint application was inhibited. Final inspection was performed and areas inspected were found in need of additional re-work prior to acceptance.

Tower Cross Braces

ZPMC requested an Inspection of Interzinc 22 coated surfaces prior to application of “mist” coat of Interfine 979. Fabrication and welding and machining is incomplete on these components and extensive damage is anticipated. ZPMC applied “mist” coat of Interfine 979 despite incomplete fabrication. Item code numbers as follows: WD1-CBSA3-1-48M, WD1-CBSA3-1-53M, WD1-CBSA3-1-65M, WD1-CBSA3-1-65M, WD1-CBSA3-1-77M, WD1-CBSA3-1-89M, WD1-CBSA3-1-99M, WD1-CBSA3-1-109M, WD1-CBSA3-1-119M.

Traveler Rail Brackets

Final acceptance inspection requested by ZPMC of (9) Traveler Rail Brackets all of which were previously inspected and rejected were re-inspected and found to exhibit no additional re-work or repairs performed, additional Interfine 979 top-coat not applied and surfaces have merely been scarified and agglomerations and contaminants removed from previous inspection identification. Bracket code numbers as follows: TR1B-PP17, TR1B-PP23, TR2E-PP10, TR2F-PP11, TR3B-PP09, TR4B-PP09, TR4D-PP10, TR5E-PP11, TR1E-PP28.

Counterweight Cover Plates

Inspection of coated surfaces of Cover Plates for counterweights numbered: CW10, CW12, CW14, CW16, CW18, CW20, CW22, CW24, CW28 were all checked for coating defects and found substantially complete with contract documents. Internal surfaces were coated with Intercure 200 HS which will be in contact with concrete and external surfaces remained in Interzinc 22. Subsequent top-coat of Interfine 979 will be applied after installation and assembly.

Miscellaneous Metal

Base metal surfaces of 221 pieces of “L” splice plates and fill plates were de-greased in accordance with SSPC SP-1 in preparation of abrasive blasting operations.

Lift 3 East

Received a telephone call from Caltrans QA Mark Miller at 17:30 hours informing Caltrans QA Lumley of on-going repairs to the internal surfaces of the lift. Caltrans QA Lumley performed inspection of localized repair areas which were abrasive blasted to base metal and an SSPC SP-10 condition and informed ZPMC “worker” of areas which required re-abrasive blasting. No ZPMC QC present during the time of this inspection and no Notice of Inspection was received for this work. Areas abrasive blasted and inspected were from Panel Points 20-23. ZPMC continued abrasive blasting after the inspection was performed.

Note: All inspections were performed jointly with ABF & ZPMC QA/QC representatives and Caltrans QA Lumley when achievable. International Protective Coatings technical service representative were available for inspections and consultation.

Summary of Conversations:

Caltrans QA Lumley inquired with ABF QA Bill Oak as to why no Notice of Inspections were sent by ZPMC for any work/repairs associated with Lift 3 East.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, (858) 699-9549, who represents the Office of Structural Materials for your project.

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Inspected By:	Lumley,James	Quality Assurance Inspector
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Reviewed By:	Carreon,Albert	QA Reviewer
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